# More Exercise: Associative Arrays

Problems for more exercises for the ["JS Fundamentals" course @ SoftUni](https://softuni.bg/trainings/2441/js-fundamentals-september-2019).

Submit your solutions in the SoftUni judge system at: [Associative-Arrays -More-Exercises](https://judge.softuni.bg/Contests/1305/Associative-Arrays-and-Maps-More-Exercises)

## Garage

Write a function that **stores cars** in garages. You will be given an **array of strings**. Each string will contain **number of a garage** and **info about a car**. You have to store the car (with its info) in the given garage. The info about the car will be in the format **"{key}: {value}, {key}: {value}…".** If the garage **does not exist, create it**. The cars will always be **unique.** At the endprint the result **ordered by the numbers of the garages** (no further sorting required) in the format:  
**"Garage № {number}:  
--- {carOneKeyOne} - {carOneValueOne}, {carOneKeyTwo} - {carOneValueTwo}…  
--- {the same for the next car}  
Garage № {number}: …"**

### Example

|  |  |
| --- | --- |
| **Input** | **Output** |
| ['1 - color: blue, fuel type: diesel', '1 - color: red, manufacture: Audi', '2 - fuel type: petrol', '4 - color: dark blue, fuel type: diesel, manufacture: Fiat'] | Garage № 1  --- color - blue, fuel type - diesel  --- color - red, manufacture - Audi  Garage № 2  --- fuel type - petrol  Garage № 4  --- color - dark blue, fuel type - diesel, manufacture - Fiat |

## Armies

Write a function that stores information about an army leader and his armies. The input will be array of strings. The strings can be in some of the following formats:  
**"{leader} arrives"** – add the leader (no army)  
**"{leader}: {army name}, {army count}"** – add the army with its count to the leader (if he exists)  
**"{army name} + {army count}"** – if the army exists somewhere add the count  
**"{leader} defeated"** – delete the leader and his army (if he exists)

When finished reading the input sort the **leaders** by **total army count** in **descending**. Then each **army** should be sorted by **count in descending**.

Print in the following format:  
**"{leader one name}: {total army count}  
>>> {armyOne name} - {army count}  
>>> {armyTwo name} - {army count}  
 …  
{leader two name}: {total army count}  
…"**

### Constrains

* The **new leaders** will always be **unique**
* When **adding new army** to leader, the army will be **unique**

### Example

|  |  |
| --- | --- |
| **Input** | **Output** |
| ['Rick Burr arrives', 'Fergus: Wexamp, 30245', 'Rick Burr: Juard, 50000', 'Findlay arrives', 'Findlay: Britox, 34540', 'Wexamp + 6000', 'Juard + 1350', 'Britox + 4500', 'Porter arrives', 'Porter: Legion, 55000', 'Legion + 302', 'Rick Burr defeated', 'Porter: Retix, 3205'] | Porter: 58507  >>> Legion - 55302  >>> Retix - 3205  Findlay: 39040  >>> Britox - 39040 |

## Comments

Write a function that stores information about users and their comments in a website. You have to store the **users**, the **comments as an object with title and content** and the **article** that comment is about. The user can only comment, when he is on the **list of users** and **the article is in the list of articles**. The input comes as array of strings. The strings will be in format:  
**"user {username}"** – add the user to the list of users  
**"article {article name}"** – add the article to the article list  
**"{username} posts on {article name}: {comment title}, {comment content}" –** save the info

At the end **sort** the articles by **count of comments** and print the **users with their comments** ordered by **usernames in ascending**.

Print the result in the following format:  
**"Comments on {article1 name}:  
--- From user {username1}: {comment title} - {comment content}  
--- From user {username2}: …  
Comments on {article2 name}:  
…"**

### Example

|  |  |
| --- | --- |
| **Input** | **Output** |
| ['user aUser123', 'someUser posts on someArticle: NoTitle, stupidComment', 'article Books', 'article Movies', 'article Shopping', 'user someUser', 'user uSeR4', 'user lastUser', 'uSeR4 posts on Books: I like books, I do really like them', 'uSeR4 posts on Movies: I also like movies, I really do', 'someUser posts on Shopping: title, I go shopping every day', 'someUser posts on Movies: Like, I also like movies very much'] | Comments on Movies  --- From user someUser: Like - I also like movies very much  --- From user uSeR4: I also like movies - I really do  Comments on Books  --- From user uSeR4: I like books - I do really like them  Comments on Shopping  --- From user someUser: title - I go shopping every day |

## Book Shelf

Write a function that stores information about **shelfs** and the **books in the shelfs**. Each shelf has an **Id** and a **genre** of books that can be in it. Each book has a **title**, an **author** and **genre**. The input comes as an **array of strings**. They will be in the format:  
**"{shelf id} -> {shelf genre}"** – create a shelf **if the id is not taken**.  
**"{book title}: {book author}, {book genre}"** – if a shelf with that **genre exists**, add the book to the shelf  
After finished reding input, sort the shelfs by **count of books** in it in **descending**. For each shelf sort the **books by title** in ascending. Then print them in the following format  
**"{shelfOne id} {shelf genre}: {books count}  
--> {bookOne title}: {bookOne author}  
--> {bookTwo title}: {bookTwo author}  
…  
{shelfTwo id} {shelf genre}: {books count}  
…"**

### Example

|  |  |
| --- | --- |
| **Input** | **Output** |
| ['1 -> history', '1 -> action', 'Death in Time: Criss Bell, mystery', '2 -> mystery', '3 -> sci-fi', 'Child of Silver: Bruce Rich, mystery', 'Hurting Secrets: Dustin Bolt, action', 'Future of Dawn: Aiden Rose, sci-fi', 'Lions and Rats: Gabe Roads, history', '2 -> romance', 'Effect of the Void: Shay B, romance', 'Losing Dreams: Gail Starr, sci-fi', 'Name of Earth: Jo Bell, sci-fi', 'Pilots of Stone: Brook Jay, history'] | 3 sci-fi: 3  --> Future of Dawn: Aiden Rose  --> Losing Dreams: Gail Starr  --> Name of Earth: Jo Bell  1 history: 2  --> Lions and Rats: Gabe Roads  --> Pilots of Stone: Brook Jay  2 mystery: 1  --> Child of Silver: Bruce Rich |